

petiole; cell *1st M*₂ small, subrectangular, with *m-cu* at or beyond midlength; vein *2nd A* long, sinuous.

Abdomen yellow, narrowly darkened laterally; hypopygium more infuscated; segments without differentiated shiny basal rings. Ovipositor with cerci long and very slender.

Habitat. SOUTH INDIA. *Holotype:* ♂, Kuttalam, Madras, 500–2,000 feet, November 23, 1958 (Fernand Schmid). *Allotype:* ♀, Krishnappanayakkan, Madras, 1,200 feet, November 30, 1958 (Fernand Schmid).

By Edwards's key to the Old World species of the subgenus *Eriocera* (1921), the present fly runs to couplet 42 where it disagrees with all succeeding species in its coloration, being most similar to *Hexatoma (Eriocera) ferruginosa* (van der Wulp) of Java. This latter fly is quite distinct in all details of coloration and venation.

Collembola from Japan. III. Hypogastrurinae and Neanurinae¹

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This paper records six species of springtail insects collected by Captain John E. Scanlon³ while with the 406th Medical General Laboratory (U. S. Army) in Japan. Specimens will be deposited with the Academy of Natural Sciences, Philadelphia, Pennsylvania.

Subfamily HYPOGASTRURINAE Börner, 1906

Hypogastrura armata (Nicolet, 1841).

The Scanlon specimens show the traits which caused Oriental individuals of the species to be designated *H. communis* (Fol-

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som, 1897). However, I follow Stach (1949, p. 131) in considering *H. communis* a variant of *H. armata*.

ADDITIONAL JAPANESE RECORD. Seven specimens, soil from rodent burrow, 23-x-1952, Shizuoka, Subashiri, Honshu, JAPAN, by J. E. Scanlon. This species was first recorded from Japan by Folsom (1897).

DISTRIBUTION. Holarctic, Neotropical, Australasian.

Hypogastrura ununguiculata (Tullberg, 1869).

JAPANESE RECORD. Five specimens, rodent nest, 7-iii-1952, Tokyo, Honshu, JAPAN, by J. E. Scanlon. This species has not been recorded previously from Japan.

DISTRIBUTION. Holarctic.

Hypogastrura japonica sp. nov. Figure 1.

TYPE COLLECTION. Three specimens, soil from rodent burrow, 23-x-1952, Shizuoka, Subashiri, Honshu, JAPAN, by J. E. Scanlon.

DESCRIPTION. Body elongate, not subglobose, segmentation distinct; setae present, scales and pseudocelli absent; integument minutely granular; color light brown mottled with blue, legs pale brown, fore part of head and antennae heavily mottled with blue; head prognathous; mouthparts chewing, mandible with molar surface; ant III and IV semiconfluent, without eversible sac between them; ant IV tip with sensory seta; ant III sense organ with rods, no cones; postantennal organ with 4 peripheral tubercles, 1 much smaller than other 3; eyes 8 and 8 on dark eyepatches; pronotum not reduced, setaceous, of same texture as other body segments; unguiculus present, about $\frac{2}{3}$ unguis; unguis and unguiculus without teeth; tenent hairs absent; colophore sacs smooth, small; furcula not ankylosed, reaching almost to colophore; dental thorns absent; mucro spoon-shaped, without teeth; anus terminal; anal spines 2, strongly curved, each about length of hind unguis; body length about 1.2 mm.

DIAGNOSTIC CHARACTERISTICS. This species is clearly a member of the subgenus *Neogastrura* (*sensu* Stach, 1949, p.

19). It may be distinguished from all other members of that group by the absence of dental thorns and of tenent hairs.

NOTE. Although data are identical, specimens of *H. japonica* sp. nov. did not come from the same collection as those of *H. armata*.

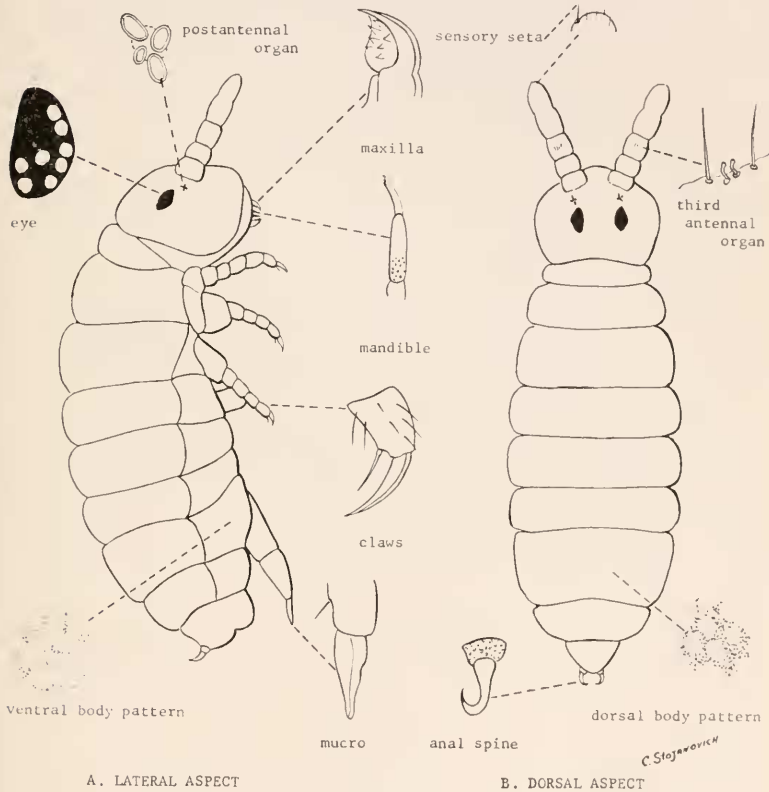


FIG. 1. *Hypogastrura japonica* sp. nov.

Subfamily NEANURINAE Börner, 1901

Protanura aphoruroides Yosii, 1953.

ADDITIONAL JAPANESE RECORD. One specimen, soil from rodent burrow, 23-x-1952, Shizuoka, Subashiri, Honshu,

JAPAN, by J. E. Scanlon. This species was first recorded from Japan by Yosii (1953).

DISTRIBUTION. Japan.

Neanura ornata Folsom, 1902.

JAPANESE RECORD. Three specimens, rodent nest, 19-iii-1952, Akabane, Honshu, JAPAN, by J. E. Scanlon. This species has not been recorded previously from Japan.

DISTRIBUTION. Japan, Alaska, Siberia.

Neanura pseudornata sp. nov. Figure 2.

TYPE COLLECTION. Three specimens, Berlese funnel sample of soil, bamboo grove in woods, 677 meters altitude, 20-vi-1952, Beppu, Oita Ken, Kyushu, JAPAN, by J. E. Scanlon.

DESCRIPTION. Body elongate, not subglobose, segmentation distinct; setae present, scales and pseudocelli absent; integument minutely granular with large reticulated segmental tubercles (head, 11; thorax, 6-8-8; abdomen, 6-8-8-6-4-2); color yellow speckled with brownish-purple, legs darker than rest of body; head prognathous, wider than long, rounded triangular; head tubercles not coalesced; mouthparts suctorial, projecting in a cone; mandible without molar surface; head of maxilla needle-like, without lamellae or teeth; antenna longer than head, segments distinct; ant IV conical; ant III sense organ with sense-rods, without cones or papillae; postantennal organ absent; eyes pigmented, 3 and 3, not on dark eyepatches; pronotum not reduced, setaceous, of same texture as other body segments; unguiculus absent; unguis without teeth; tenent hairs absent; colophore sacs smooth; furcula absent; anal segment large; supra-anal valve bilobed; anal spines absent; body length about 1.1 mm.

DIAGNOSTIC CHARACTERISTICS. This species is close to *Neanura ornata* Folsom, 1902. It may be distinguished from *N. ornata* and other known *Neanura* by the following combination of characters: (1) head wider than long; (2) eyes 3 and 3, pigmented; (3) head tubercles not coalesced.

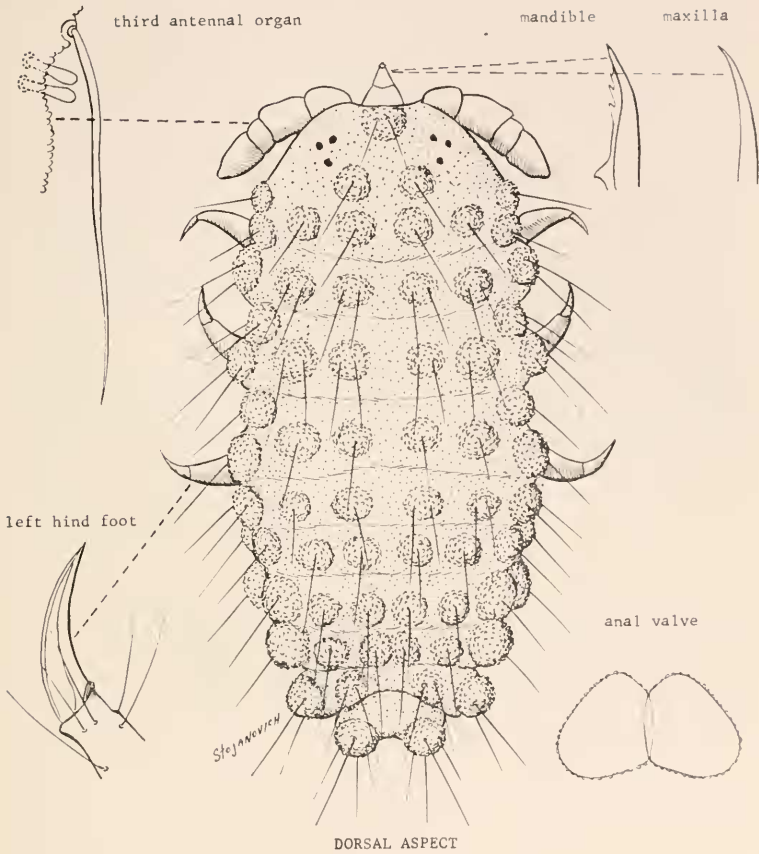


FIG. 2. *Neanura pseudornata* sp. nov.

SUMMARY

Hypogastrura armata, *H. ununguiculata*, *H. japonica* sp. nov., *Protanura aphoruiroides*, *Neanura ornata*, and *N. pseudornata* sp. nov., are reported from Japan. Of these, only *H. armata* and *P. aphoruiroides* have been recorded previously from the country.

JAPANESE SUMMARY

(Prepared by Dr. Nobuo Sakurai, Department of Bacteriology, School of Medicine, University of Chiba, Chiba, Japan.)

6種の springtail 昆虫が日本より記録される。すなわち;
Hypogastrura armata (齧歯類の土穴, 静岡県, 須走, 本州);
H. ununguiculata (齧歯類の巣, 東京, 赤羽, 本州); H. japonica sp. nov.
 (齧歯類の土穴, 静岡県, 須走, 本州); Protanura aphoruroides
 (齧歯類の土穴, 静岡県, 須走, 本州); Neanura ornata (齧歯類
 の土穴, 東京, 赤羽, 本州); N. pseudornata sp. nov. (竹やぶの土,
 大分県, 別府, 九州)。これらのうち, H. armata (= H. communis) あらび
P. aphoruroides のみがこれまで日本より記録されていた。

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